

# ISD News and Views

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## Commentary

We have heard much about the use of satellite transmission for distance learning and teleconferencing. Bill Harrington, from SRS, took the big step and put on a teleconferenced training session. Look to this month's Agency Spotlight to find out more about Bill's efforts and the possibilities of teleconferencing.

## Agency Spotlight

### Satellite Communications

On December 11, 1991, the Human Services subcabinet and the Department of SRS conducted a two-hour training session using satellite television technology. The training session was transmitted from KUSM, the Montana State University television station in Bozeman.

The purpose of the demonstration was to show a training alternative to time-consuming travel. Montana's size and remote population results in an inordinate amount of time being spent behind the steering wheel in order to attend training (two days of travel is required for face-to-face communications to occur between Helena offices and offices in the eastern part of the state). Telecommunication is an alternative which allows timely and consistent information to be disseminated simultaneously to many locations throughout the state.

Montana State University "up-linked" the television signal to a satellite. Seventeen sites around the state, through the use of a satellite receiver dish, received and televised the signal. Most receiving sites were in schools; however, the facilities at the Eagle Satellite Company in

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Butte and the Veterans Hospital in Miles City also participated.

The training session featured one-way video and two-way audio. Eight of the larger sites were connected through a conference call and the other sites had a toll-free number to call to participate in the question-and-answer periods.

The demonstration itself was a huge success. The training, due to problems caused by first-time glitches, was not as successful as hoped. The trainers did an outstanding job. The production transmitted from KUSM was excellent. The conference bridge set up by the Department of Administration was successful, despite some human error at the viewing locations. The television satellite dishes at locations had a difficult time receiving the signal; however, that was primarily cleared up as they went along. Each individual element of the project performed their functions admirably. The problems came in the interconnection of the different areas.

Even with the problems experienced, those who observed the demonstration were excited about the potential use of telecommunications. When asked of the merit of telecommunications, 79.6 percent rated it as good or excellent. When asked if they would be interested in pursuing teleconferencing in the future, 92.5 said yes.

The demonstration could not have been conducted without the help of the following: the Department of Administration, Telecommunications Bureau; the Department of Public Instruction; KUSM television in Bozeman; the Department of Social and Rehabilitation Services; and the seventeen locations around the state who allowed us to use their facilities.

As a result of the Task Force project, five recommendations were made:

1. Create a single coordination point, within State government, for telecommunication activities.
2. Establish a production facility capable of transmitting television signals from Helena to a satellite uplink.
3. Identify and equip one satellite-receiving site

in each county seat. The site would be available to all State agencies.

4. Continue with the implementation of the METNET project which will provide for two-way video and voice communication in every county.
5. Continue to explore the possible telecommunication uses for Montana.

--Bill Harrington, SRS

## *Conference Call Update*

### Procedure Correction:

The ISD Help Desk has recently become aware of a problem some of you may have experienced when initiating a conference call from your **single-line telephone**. The problem identified was the inability to dismiss the continuous ringing or busy tone when you have called a party and received no answer or the line is busy. Short of hanging up and disconnecting your parties already conferenced in to the call, there was nothing you could do except attempt to carry on your conversation over the tone of the constant ringing or busy signal. As luck--and technology--would have it, we have found a solution!

If you receive no answer or a busy signal when trying to conference in a member of your call, simply flash the hookswitch and dial the number 1187, and you will then receive a normal dial tone which will allow you to conference in your remaining parties or commence with the call.

Please make note of this change in your 1992 Montana State Government Telephone Directory under the section dealing with conference calls on page ii, and please don't hesitate to call the ISD Help Desk at 444-2973 if you have any questions or problems when initiating a conference call from your telephone.

*(Continued on Page 3)*

### Pre-Scheduled or Operator-Assisted Calls:

Keep in mind, too, you have the convenience of scheduling your conference call with the Conference Operator--who, at a prescribed time, will contact all your identified parties and when they are on the line, will call you and connect you into the call. It's an easy way to make more efficient use of your precious time.

If you choose to conduct an operator-assisted conference call, you may make a reservation by calling the Conference Operator at 444-2511. We would ask your cooperation in following the few guidelines listed below to help ensure a smooth and quickly executed call.

1. Please provide the Conference Operator with advance notice of your call to guard against scheduling conflicts. We suggest a one-day advance notice.
2. Please provide the Conference Operator with the name and direct telephone number of the individual to moderate the call.
3. Please provide the Conference Operator with the name and direct telephone number of all parties involved in the call.
4. Please make certain all parties to be called are aware of the exact time of the call and have confirmed their availability.
5. We would ask that all parties be available ten minutes prior to the scheduled time of the call. Conference calls with many participants take time to set up.
6. In the event a party is accidentally disconnected during the call, please contact the Conference Operator at (406) 444-2511 and explain the situation.

Please refer to the front of your 1992 Montana State Telephone Directory (pages ii and iii) for specific details and instructions regarding conference calls--but don't forget--the ISD Help Desk is here to assist you with all facets of telephone usage. Feel free to give us a call at 444-2973.

### Voice Mail Hints

1. If you reach someone's voice mailbox, and you do not want to listen to the greeting, you can bypass the greeting by pressing "5" on your telephone. As soon as you press "5", you will hear a beep, which is your signal to begin recording your message.
2. Each mailbox will retain a "LISTENED TO" message for 7 days. Seven days later--to the second--that you have listened to the message, Meridian Mail will purge the message from your mailbox. This 7-day purge will only occur if you HAVE listened to the message.
3. Express Messaging is a great way to leave a message for a Meridian Mail user. If you do not need to speak to the person, simply dial 1889 and then enter the person's mailbox number, followed by the # sign.

### New Policy for SNA Network Changes

ISD has implemented a new policy concerning requests for changes to the SNA Network. This policy only affects the implementation of NCP/3725 changes (NCP = Network Control Programs). Starting the first full week of March 1992, DNDTS (Data Network Design Technical Services) will adhere to a four-week cycle of NCP gens as follows:

- \* NCP6 (Kalispell) and NCP9 (Missoula) on the first week of the cycle;
- \* NCP7 (Billings) and NCP8 (Great Falls) on the second week of the cycle;
- \* NCP11 (Mitchell Building) on the third week of the cycle, and;
- \* NCP15 (Mitchell Building) and NCP12 (Armory) on the fourth week of the cycle.

(Continued on Page 4)

Generation/implementation for the respective NCP's will be performed during the cycle week based on the workload priorities of ISD, and in particular the Data Network Design Section.

All change requests must be entered into ISD's automated online change/problem management system "INFO System". The requests will be processed the week prior to the generation/implementation week at ISD's normal Tuesday morning change meeting. DNDTS will assume that the notes and comments collected in that meeting are final. However, to provide post change control meeting input, the actual deadline for changes will be noon on the last working day of the week (prior to the cycle week). Any post change control meeting changes must be provided to DNDTS in person to avoid any confusion.

The purpose of this policy is to relieve the work-load burden of the SNA systems programming staff so that they can devote more time to projects. This policy will require more detailed planning by user agencies, and such planning must be presented to ISD sooner.

ISD recognizes that there are emergency situations where changes must be implemented and waiting for the next NCP cycle is not an option. ISD has a mechanism in place to handle such cases; however, there is a formal ISD management signoff process that must be followed before such an emergency change will be implemented. This is to ensure that the changes are justifiable.

If there are any questions or concerns, please contact Terry Kramer at 444-2556 or Tom Buchholz at 444-2904.

## *Term Contract Status*

### *Micro Term Contracts*

Revised price lists are once again under way for Dell and Digital computers. Also, ComputerLand has submitted a list of prices to upgrade various versions of Netware 2.2 to 3.11. Interested parties should contact Debbie Owen at 444-1357 or Gary Warren at 444-0515.

### NOTES

On **DIGITAL/WYLE** addendum 1, please note that the Wyle Federal ID number is 95-177-9998. Also, Wyle has been experiencing some problems in the invoicing of shipping costs. Please note, unless you have agreed IN ADVANCE to pay expedited shipping charges, no shipping is to be paid by the State on any micro term contract. If shipping charges are included on invoices which do not allow pre-approved expedited shipping charges, please cross through these charges and pay the adjusted amount. This problem should be cleared up by Wyle shortly.

On **DELL** addendum 1, please note that Dell systems are configured with the video adapter built on to the motherboard. A Dell monitor purchased separately will not come with an adapter.

Also, in the area of service, Dell has entered into a new service contract with BancTec Service Corporation (BSC) of Dallas, Texas. BancTec will service all State computers purchased from Dell on or after February 3, 1992. Xerox will continue to support State computers purchased from Dell before February 3, 1992. The State should not experience any change to the current problem-reporting procedure whereby the user agency contacts Dell with a description of the problem experienced. Agencies experiencing problems with Dell service or service problems with any term contract vendor are encouraged to call the Purchasing Division and Debbie Owen at 444-1357 or Gary Warren at 444-0515 in ISD.

On **COMPUTERLAND** addendum 2, Core International drives come with a five (5) year

warranty from Core International. At no additional charge, ComputerLand of Helena, as the dealer, will take responsibility for swapping out failed drives and replacing them with new drives should an agency experience a problem during the five (5) year warranty. IBM will maintain these drives as well, for an extra charge.

#### HP Laser Term Contract

Purchasing Division awarded a new HP laser contract to ComputerLand of Western Montana, in Missoula, in March 1992. Contract No. tc336-v distribution will be taking place April 1992.

## *Microcomputers*

### *Considerations for Migration from WordPerfect 5.0 to WordPerfect 5.1*

ISD provides full support and training for users of WordPerfect 5.1. ISD will continue to support WP5.0 until most agencies have switched to WP5.1. Training has been modified to accommodate both groups. To receive problem resolution assistance contact End User Computing at 444-2859 or 444-1392. The following information is provided for agencies that are considering upgrading to WordPerfect 5.1.

#### **Improvements:**

Some of the major areas of improvement of WP5.1 over WP5.0 include a menu bar and mouse support, an equation editor, greater capabilities with tables and columns, easier to use macro editor, easier merge creation, greater capabilities with outlines, and context-sensitive help.

#### **Compatibility:**

WordPerfect 5.1 users may retrieve any WordPerfect 5.0 or 5.1 document. However, WordPerfect 5.0 users may have problems retrieving a 5.1 document if it contains any of the new 5.1 features. The document can be retrieved, but if the 5.1 document contains features exclusive to 5.1, they will not display. The 5.0 recipient would find "unknown" codes imbedded in the document wherever a new 5.1 feature was used. If the 5.1 document is to be edited and returned, the 5.0 user would need to take care to not disturb the "unknown" codes. If the 5.1 document is to be completed by the 5.0 user, considerable reformatting could be involved if the document contains new features of 5.1. Because of these potential compatibility difficulties, it is probably better for an agency, wherein document sharing and exchange takes place, to convert all users to WP5.1 at the same time.

#### **Software Cost:**

\$45.00 per user -	to upgrade from WP5.0 to WP5.1 without documentation.
\$75.00 per user -	to upgrade from WP5.0 to WP5.1 with documentation.

Although Central Stores no longer keeps WordPerfect 5.0 on the shelf, they will order it for you upon request.

#### **Training Cost:**

ISD will provide free overviews covering the major differences between WP5.0 and 5.1. Also offered are 1/2 day classes (\$37.50) which cover the more advanced topics of WP5.1. Check the Training Calendar located at the back of this newsletter for dates and location. Contact the ISD Help Desk at 444-2973 to enroll in a class. Contact Sherry Hanks at 444-1392 for information about class content.

#### **Disk Space:**

Documents which exploit the full desk-top publishing and graphics capabilities of WP5.0 or WP5.1 will consume more hard disk space. Disk space requirements have more to do with the complexity of the document than the version of WordPerfect. For example, documents using desk-top publishing or graphics could utilize five to seven times as much disk space as simpler reports or memos.

Disk Space (in bytes)		Type of document
WP5.0	WP5.1	
3,000	3,300	1 1/2 page text only
8,300	10,000	1 1/2 page newsletter, columns, headers, fonts and no graphics
22,000	18,200	1 1/2 page newsletter, columns, headers fonts and two small graphics
N/A	17,000	1 1/2 page newsletter, columns, and 3"x 3" table

We suggest that you review available hard disk space if you need to produce many documents which contain graphics and other desk-top publishing elements.

## Techtalk

How many times have you wished that you could be in two places at the same time? Well, now you can! At least in the sense that you can view two different parts of the same spreadsheet in Lotus 123. You can do this by using the Lotus Window command. After pressing /Worksheet Window, you can view your work in several ways. You can split the screen horizontally or vertically into two separate windows--each showing the same worksheet. You may then synchronize scrolling in the two windows or scroll through each independently from the other one. Here's how:

1. Position the cell pointer to the position in your spreadsheet where you would like to split the screen.
2. Select /Worksheet Window.
3. Select one of the following options:

Horizontal	Create two windows with the screen split horizontally.
Vertical	Create two windows with the screen split vertically.
Sync	Synchronizes the window scrolling. For horizontal windows, Sync keeps the same columns on the screen in both windows when you scroll through columns. For vertical windows, Sync keeps the same rows on the screen in both windows when you scroll through rows.
Unsync	Unsynchronizes window scrolling, allowing windows to scroll independently from each other.
Clear	Restores the screen to only one window.

To move the cell pointer from one window to the other, press WINDOW (the F6 function key).

Some tips to remember:

When using horizontal or vertical windows, any commands that you select that change the worksheet display affect both windows, except for /Worksheet Column, /Worksheet Global Column-Width, and /Worksheet Titles, which affect only the current window.

When you clear horizontal or vertical windows, you will be restored to one worksheet using the titles, global and individual column width settings, and hidden/displayed columns of the top or left window.

If you have any questions about using horizontal or vertical windows in Lotus, contact Irv Vavruska in End User Computing at 444-2858.

## *End Notes*

### *Government Technology Conference*

The Western Regional Government Technology Conference will be held on May 13-15, 1992 in Sacramento, California and is a conference designed by government for government. This conference contains exhibitors presenting state of the art hardware and software as well as a variety of seminars on new technologies. For additional information on this conference call Polly at 444-2700.

### *Systems Analysis Class Offered*

The five-day "Fast Start in Systems Analysis" class, taught by Systemation out of Denver, Colorado, will be offered May 4-8 at the Colonial Inn. The class is appropriate for both technical and non-technical staff interested in analyzing a business function for improvement. The class is being hosted by the Department of Labor and Industry and will cost approximately \$500/student for the 5 days. Please call Kirsten Graham at 444-3421 for registration information.

### *Wastebusters Need Your Help!*

In an effort to reduce paper waste at the State, we at *News & Views* are asking for your support. For example, several people have suggested that one individual in a group could receive a copy of *News & Views* and then route it through the group, thus reducing the need for multiple copies. Another possibility would be for us to distribute an electronic "No Frills" version of *News & Views* to anyone currently using ZIP!Mail. Whatever solution you find

most effective for your group, if it consists of eliminating copies of *News & Views*, we need to know about it. Please submit any names to Sherry Leone, at the ISD Help Desk, that you wish removed from the *News & Views* distribution list. If you are a ZIP!Mail user and are interested in receiving an electronic copy of *News & Views*, please call Polly at 444-2700. Thank you for your help in this effort.

### *Submit Articles*

If you wish to submit an article to *News and Views* for publication, the following schedule provides dates that articles must be received by in order to be included in the issues listed below:

June Issue	04/20/92
July Issue	05/19/92

### **ISD HELP DESK 444-2973**

Have a problem? Need ISD assistance or support for any of your information processing needs--either voice or data? The central contact point is the ISD Help Desk.

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Editor: Curt Secker

# Training Information

All classes will be held in the Training Room in the basement of the Teachers Retirement Building at 1500 6th Ave. unless another location is specified. There is a limit of 12 participants per paid class and 20 participants per demonstration (free) class, unless otherwise announced.

To enroll in a class, send an enrollment application to the Department of Administration, ISD Help Desk, Mitchell Building, Helena, MT 59620. If you have questions about enrollment, telephone the Help Desk, 444-2973. *Once you enroll in a class, by mail or telephone call, the full fee will be charged UNLESS you cancel at least three business days before the first day of class.*

The classes available and their costs are as follows:

<u>Class Name</u>	<u>Cost</u>	<u>Length in Days</u>
*Introduction to TSO/SPF	\$ 75.00	1
*Introduction to JCL (Job Control Language)	300.00	4
*Introduction to CICS Programming	575.00	5
*Introduction to IDMS Database Programming	480.00	5
*IDMS ADS/Online	480.00	5
*Introduction to CULPRIT	225.00	3
*Subscribing in CULPRIT	FREE	¼
CULPRIT Programming for IDMS	150.00	2
*Using COMPAREX	37.50	½
*Introduction to SAS: Module 1	18.75	¼
Module 2	18.75	¼
Module 3	187.50	2½
Module 4	37.50	½
Module 5	37.50	½
*Novell Network Administration	150.00	2
*PC Memory Management Options and Considerations	FREE	¼
*Windows Purchase, Installation and Use Considerations	FREE	¼
*Windows for the Technical Support Team	150.00	2
Beginning Microcomputer Skills	75.00	1
Fundamentals of DOS	75.00	1
*Intermediate DOS	75.00	1
*Introduction to Novell Networks	37.50	½
Introduction to Windows	75.00	1
Introduction to WordPerfect (5.0 or 5.1)	112.50	1½
*Advanced Features of WordPerfect 5.0	112.50	1½
WordPerfect (5.0 or 5.1) Complex Document Functions	37.50	½
More WordPerfect (5.0 or 5.1) Complex Document Functions	37.50	½
WordPerfect 5.1 Tables	37.50	½
WordPerfect 5.1 Columns and Math Functions	37.50	½
WordPerfect 5.1 Graphics	37.50	½
*WordPerfect 5.1 Tips and Tricks	FREE	¼
Conversion from WordPerfect 5.0 to 5.1	FREE	¼
Spreadsheet Design and Documentation	75.00	1
*Conversion from Lotus 1-2-3 Rel. 2.2 to Rel. 3.1	FREE	¼
Introduction to Lotus 1-2-3, Release 2.3 or 3.1	150.00	2

Intermediate Lotus 1-2-3, Release 2.3 or 3.1	75.00	1
Lotus 1-2-3 WYSIWYG Features	37.50	½
Lotus 1-2-3, Release 3.1, 3-Dimensional Spreadsheets	37.50	½
*Freelance	75.00	1
*Lotus 1-2-3, Release 2.3, Macros	150.00	2
*Introduction to Lotus 1-2-3 Database Features	150.00	2
*Introduction to PFS:Professional File, Ver. 2.0	75.00	1
*Micro Database Concepts and Design	75.00	1
*Introduction to R:Base, Release 3.1	187.50	2½
*Intermediate R:Base (Rel. 3.1)	150.00	2
*Introduction to dBASE III+	250.00	4
*State Telephone Training	FREE	¼

\* This class is not scheduled during the time covered in this issue.

# Training Calendar

## Data Network/Mainframe Classes

None

## Microcomputer Classes

April 2	Beginning Microcomputer Skills
April 15	Introductions to Windows
May 4	Fundamentals of DOS

## Word Processing Classes

April 6, April 7 a.m.	Introduction to WordPerfect (5.0 or 5.1)
April 13 a.m.	WordPerfect 5.1 Tables
April 14 a.m.	WordPerfect 5.1 Columns and Math Functions
April 20	WordPerfect 5.1 Graphics
April 21 a.m.	WordPerfect Complex Document Functions
April 22 a.m.	More WordPerfect Complex Document Functions
May 7 a.m.	Conversion from WordPerfect 5.0 to 5.1
May 11, May 12 a.m.	Introduction to WordPerfect (5.0 or 5.1)
May 13 p.m.	Conversion from WordPerfect 5.0 to 5.1
May 15 a.m.	WordPerfect (5.0 or 5.1) Complex Document Functions
May 19 p.m.	WordPerfect 5.1 Columns and Math Functions
May 20 a.m.	WordPerfect 5.1 Tables

## Spreadsheet Classes

April 9 and 10	Introduction to Lotus 1-2-3 (Release 2.3 or 3.1)
April 14 p.m.	Lotus 1-2-3 WYSIWYG Features (Release 2.3 or 3.1)
April 21 p.m.	Lotus 1-2-3 Release 3.1, 3-Dimensional Spreadsheets
April 27	Intermediate Lotus 1-2-3 (Release 2.3 or 3.1)
May 5 and 6	Introduction to Lotus 1-2-3 (Release 2.3 or 3.1)
May 15 p.m.	Lotus 1-2-3 WYSIWYG Features (Release 2.3 or 3.1)
May 18	Lotus 1-2-3 Spreadsheet Design and Documentation
May 26 and 27	Lotus 1-2-3 Macros (Release 2.2, 2.3 or 3.1)
May 28	Intermediate Lotus 1-2-3 (Release 2.3 or 3.1)

## Database Classes

None

## Communication Classes

None

## *Microcomputer Classes*

**BEGINNING MICROCOMPUTER SKILLS:** presented by the staff of The Computer School

**DATES:** April 2, 1992  
**TIME:** 8:30 a.m. to 4:30 p.m.  
**PREREQUISITE:** None  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This course will give participants brief hands-on experience with microcomputers. The following topics will be covered:

- The Machine
- The Operating System
- Word Processing
- Spreadsheets and Graphics
- File Management
- Communications

Most class time will be spent using microcomputers and software. This course helps develop a positive attitude toward using microcomputers and teaches their basic functions. This class--or its equivalent--is a prerequisite for our other microcomputer courses.

**FUNDAMENTALS OF DOS:** presented by the staff of The Computer School

**DATE:** May 4, 1992  
**TIME:** 8:30 a.m. to 4:30 p.m.  
**PREREQUISITE:** Beginning Microcomputer Skills  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

"Fundamentals of DOS" is intended for microcomputer users who need to know more about controlling the microcomputer through its operating system. Programming experience is NOT required. Topics to be covered include:

- What is DOS? Why is it necessary to know about it?
- DOS names for peripherals
- File naming
- Set-up files such as CONFIG.SYS
- Internal DOS commands - DIR, ERASE, RENAME, TYPE, COPY and their variations
- External commands - FORMAT, SYS, DISKCOPY, CHKDSK, MODE
- Interpreting batch files
- Backup procedures

**INTRODUCTION TO WINDOWS:** presented by the staff of The Computer School

**DATE:** April 15, 1992  
**TIME:** 8:30 a.m. to 4:30 p.m.  
**PREREQUISITE:** Beginning Microcomputer Skills or three months of daily microcomputer use  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This course is a general introduction to Windows. It will cover the basics and show how Windows makes other applications easier to use and more productive. Topics will include:

- What are Windows - multi-tasking and task switching
- Using DOS applications
- Using Windows accessories and features
- Screen, window and menu navigation
- Window sizing and movement
- Customization

This course will not include training for system administrators and programmers. It will not cover Windows installation, maintenance or advanced features such as use for programming and file/directory management.

### *Word Processing Classes*

**INTRODUCTION TO WORDPERFECT:** presented by the staff of The Computer School

**DATE:** April 6, April 7 a.m.  
May 11, May 12, a.m.  
**TIME:** 8:30 a.m. to 3:30 p.m. on first day  
8:30 a.m. to noon on second day  
**PREREQUISITE:** Beginning Microcomputer Skills or equivalent  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class is a generic introduction to WordPerfect for new users of release 5.0 or 5.1. Experience with WordPerfect is not necessary. Participants will go through the fundamentals of creating, formatting, editing and printing documents. Some advanced features will also be covered, including checking spelling, finding a word or phrase, marking blocks of text, moving text and listing/retrieving document files.

**WORDPERFECT 5.1 TABLES:** presented by staff of the Computer School

**DATE:** April 13, 1992  
May 20, 1992  
**TIME:** 8:30 a.m. to noon  
**PREREQUISITE:** Introduction to WordPerfect 5.0 or 5.1  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class will cover the creation of tables in WordPerfect 5.1. Once students practice with WordPerfect's Tables feature they will be able to create and edit large, complex tables and provide automatically for table entries requiring calculation. Students will learn to create tables with text only or with

combinations of text and numbers. Students will use math functions and create formulas to generate table entries and will define and generate column totals and row totals.

**WORDPERFECT 5.1 COLUMNS AND MATH FUNCTIONS:** presented by staff of the Computer School

**DATES & TIMES:** April 14, 1992, 8:30 a.m. to 12:00 noon  
May 19, 1992, 1:00 p.m. to 4:30 p.m.  
**PREREQUISITE:** Introduction to WordPerfect 5.0 or 5.1  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class will cover the column and math features in WordPerfect 5.1. Students will learn to set up and edit newspaper and parallel columns of various widths and lengths. They will practice editing text or figures in columns without losing the desired layout or visual effect. For column entries requiring calculation, subtotals and totals, students will learn to create and use column definitions, math functions, and formulas.

**WORDPERFECT COMPLEX DOCUMENT FUNCTIONS:** presented by staff of the Computer School

**DATE:** April 21, 1992  
May 15, 1992  
**TIME:** 8:30 a.m. to noon  
**PREREQUISITE:** Introduction to WordPerfect 5.0 or 5.1  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class will cover Master and Subdocument design as well as creation of tables of contents, lists of tables and lists of figures. Using WordPerfect's Master Document feature allows creation of larger or more complex documents while providing more manageable and editable documents. Examples are reports containing multiple chapters or requiring indices, tables of contents, lists of figures and tables, outlines, headers and/or footers. Students currently using WordPerfect 5.0 or 5.1 will learn WordPerfect features that make it easy to generate tables of contents, lists and outlines and to combine subdocuments into a complex master document. Students will learn how to build, edit and expand a master document that includes these various lists of the document's contents.

**MORE WORDPERFECT COMPLEX DOCUMENT FUNCTIONS—FONTS, STYLES AND LAYOUT:**  
presented by staff of the Computer School

**DATE:** April 22, 1992  
**TIME:** 8:30 a.m. to noon  
**PREREQUISITE:** WordPerfect (5.0 or 5.1) Complex Document Functions  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class will expand upon the concepts covered in the prerequisite class. Persons currently using WordPerfect 5.0 or 5.1 will learn WordPerfect features that they can use to create a variety of reports and other complex documents. Students will learn to incorporate headers and footers, footnotes or endnotes, and cross-referencing into the Master and Subdocument design. The class will also cover the use of Style, Font, Text In/Out, Graphics and Compose functions for document design and layout. It will be taught using WordPerfect 5.1, but concepts and functions covered are available in WordPerfect 5.0.

**WORDPERFECT 5.1 GRAPHICS:** presented by staff of the Computer School

**DATE:** April 20, 1992  
**TIME:** 8:30 a.m. to 4:30 p.m.  
**PREREQUISITE:** Introduction to WordPerfect  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class will cover the creation and use of WordPerfect 5.1 graphics. Students will learn to create and edit graphic figures, boxes and lines. Hands-on exercises will include using these boxes, figures and lines with a variety of fonts and with the compose function. The class will also cover changes in the Setup and Print functions often associated with graphics.

**CONVERSION FROM WORDPERFECT 5.0 TO 5.1:** presented by Sherry Hanks of the Application Services Bureau

**DATES & TIMES:** May 7, 1992, 10:00 a.m. to 12:00 noon  
May 13, 1992, 1:30 p.m. to 3:30 p.m.  
**PREREQUISITE:** Introduction to WordPerfect, Ver. 5.0 or equivalent  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This free class is designed for persons who are experienced with WordPerfect. It will cover the functional differences between Versions 5.0 and 5.1. The many new features to be demonstrated include:

- Menu and mouse support features
- Table setup, editing and graphic capabilities
- Equation editor
- Improved outlining function
- Improved macro editor
- Easier merge creation
- Context-sensitive help

### *Spreadsheet Classes*

**SPREADSHEET DESIGN AND DOCUMENTATION:** presented by Irvin Vavruska of the Application Services Bureau

**DATE:** May 18, 1992  
**TIME:** 8:30 am to 4:30 pm  
**PREREQUISITE:** Introduction to Lotus 1-2-3  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class will emphasize the importance, effectiveness and the organizational benefits of good spreadsheet design and documentation. Lotus 1-2-3 Release 2.2 will be used to demonstrate good and bad techniques. Some common methods for solving logic problems and locating design and programming mistakes will be covered.

**INTRODUCTION TO LOTUS 1-2-3, RELEASE 2.3 OR 3.1:** presented by the staff of The Computer School

**DATE:** April 9 and 10, 1992  
May 5 and 6, 1992  
**TIME:** 8:30 a.m. to 4:30 p.m. each day  
**PREREQUISITE:** Beginning Microcomputer Skills  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class is a generic introduction to Lotus 1-2-3 for persons with little or no Lotus experience. It will consist of instructions and hands-on practice, with lab time available for building spreadsheets of the participants' choosing.

The class will cover design, creation, printing and editing of spreadsheets. Additional topics will include selected graphic features, the use of formulae to connect spreadsheets, and the opening of multiple files at the same time. Students will learn about new WYSIWYG (What You See Is What You Get) features of Releases 2.3 and 3.1 such as enhanced printing of spreadsheets and graphs.

**LOTUS 1-2-3 WYSIWYG FEATURES:** presented by the staff of The Computer School

**DATE:** April 14, 1992  
May 15, 1992  
**TIME:** 1:00 p.m. to 4:30 p.m.  
**PREREQUISITE:** Introduction to Lotus 1-2-3  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This course is intended for users of Release 2.3, 3.1 or 3.1+ who are already using Lotus 1-2-3 to create spreadsheets. It introduces students to the WYSIWYG (What You See Is What You Get) features of Lotus 1-2-3. The class consists of lecture and hands-on practice with the following features:

- Format--fonts, boldface, italics, underline, shadow, and outline
- Text--ranges, alignment, edit
- Screen display, zoom and customization
- Graphics within a worksheet--adding, enhancing, changing size or location
- Page layout
- Previewing and printing
- Advanced WYSIWYG features

**INTERMEDIATE LOTUS 1-2-3, RELEASE 2.3 OR 3.1:** presented by the staff of The Computer School

**DATE:** April 27, 1992  
May 28, 1992  
**TIME:** 8:30 a.m. to 4:30 p.m.  
**PREREQUISITE:** Introduction to Lotus 1-2-3  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This course is intended for users of Release 2.3, 3.1 or 3.1+. It covers intermediate features of Lotus 1-2-3 for those who are familiar with Lotus basics. It consists of instructions and hands-on practice, with lab time available for building spreadsheets of the students' choosing.

The following topics will be presented:

- @ functions
- Date and time formats and functions
- Ranges--naming, hiding and protecting ranges; using range commands
- Global defaults
- Titles, windows and text editing

Time permitting, the following topics will be covered with some hands-on practice:

- Selected file functions and file linking
- Magellan Viewer Addin (available in Releases 2.3 and 3.1+ only)
- Auditor Addin (available in Releases 2.3 and 3.1+ only)

**LOTUS 1-2-3, RELEASE 3.1, 3-DIMENSIONAL SPREADSHEETS:** presented by the staff of The Computer School

**DATE:** April 21, 1991  
**TIME:** 1:00 p.m. to 4:30 pm  
**PREREQUISITE:** Introduction to Lotus 1-2-3  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This course is intended for users of Release 3.1 who are using Lotus 1-2-3 to create spreadsheets. It covers the purposes of three dimensional spreadsheets and provides hands-on practice with multiple (3-dimensional) worksheets within a file. Features covered include:

- Multiple worksheet uses
- Inserting and deleting worksheets
- Navigation among worksheets
- Working with three-dimensional ranges
- Perspective view
- Using group mode
- Working with more than one file in memory
- Navigating among files

**LOTUS 1-2-3 MACROS:** presented by Irvin Vavruska of the Application Services Bureau

**DATE:** May 26 and 27, 1992  
**TIME:** 8:30 am to 4:30 pm each day  
**PREREQUISITE:** Beginning and Advanced Lotus 1-2-3 Release 2.2  
**LOCATION:** Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class is designed for those who want to learn about Lotus 1-2-3 macros. It will consist of instruction, demonstrations, and hands-on practice with lab time available to build spreadsheets of participant's choosing. The class will concentrate on using 1-2-3 Release 2.3 to design, create, and edit macros to perform simple operations or redundant tasks. The material covered will apply to all releases of Lotus 1-2-3 (2.2, 2.3, and 3.1). It will include writing and debugging macros, using the keystroke recorder, and using advanced macro commands.

**ISD CLASS ENROLLMENT APPLICATION**  
**COMPLETE THIS APPLICATION IN FULL AND**  
**RETURN IT TO THE INFORMATION SERVICES "HELP DESK"**  
**PRIOR TO THE FIRST DAY OF CLASS**

COURSE DATA
Course Requested: _____
Date Offered: _____

STUDENT DATA
Name: _____
Soc. Sec. Number (for P/P/P): _____
Agency & Division: _____
Mailing Address: _____ _____
Phone: _____
How have you met the required prerequisites for this course? Explain, giving the class(es) taken, tutorial(s) completed, and/or experience. _____ _____ _____

BILLING INFORMATION/AUTHORIZATION
ISD Billing Number (5 digits): _____
Authorized Signature: _____

FULL CLASS FEE WILL BE BILLED TO THE REGISTRANT UNLESS  
CANCELLATION IS MADE THREE BUSINESS DAYS BEFORE  
THE START DATE OF THE CLASS.

**SEND COMPLETED FORM TO:**  
**ISD HELP DESK, DEPARTMENT OF ADMINISTRATION**

DEPARTMENT OF ADMINISTRATION  
INFORMATION SERVICES DIVISION  
ROOM 25 MITCHELL BLDG  
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